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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: William W. King
Serial No.: 10/607,900
Date Filed: June 27, 2003
Group Art Unit: 3672
Examiner: Unknown
Title: *Iterative Drilling Simulation Process For Enhanced Economic Decision Making*

EV352394434US

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express mail No. EV352394434US in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Jay Howard
Jay Howard
06/21/2004

Date

Dear Sir or Madam:

INFORMATION DISCLOSURE STATEMENT

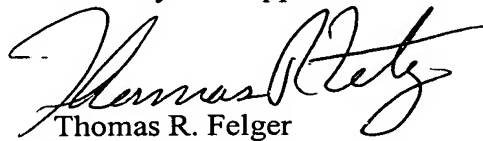
Applicant respectfully requests, pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, that the reference listed on the attached PTO-1449 form, and previously cited in U.S. Patent Serial No. 09/820,242 filed March 28, 2001, by William W. King, and entitled *Iterative Drilling Simulation Process for Enhanced Economic Decision Making*, now U.S. Patent No. 6,612,382, be considered and cited in the examination of the above-identified continuation application. Pursuant to 37 C.F.R. § 1.98(d), copies of the references are not being furnished. Applicant is enclosing copies of certain references listed on the PTO-1449 form which were not previously cited in the above-mentioned patent. Furthermore, pursuant to 37 C.F.R.

§§1.97(g) and (h), no representation is made that these references are material to the patentability of the present application.

Applicant believes no fees are due; however, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicant


Thomas R. Felger
Reg. No. 28,842

Date: 21 June 2004

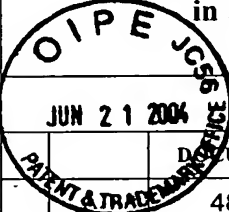
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PTO-1449		Application No. 10/607,900		Applicant(s) William W. King		
Information Disclosure Citation in an Application		Docket Number 074263.0169 (Old number 063718.0279)		Group Art Unit 3672	Filing Date 6/27/03	
U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
A.	1209299	12/19/16	Hughes	--	--	--
B.	1263802	04/23/18	Reed	--	--	--
C.	1394769	10/25/21	Sorensen	--	--	05/18/20
D.	3660649	5/72	Gilchrist et al.	175	376	07/16/76
A.	3761701	9/73	Wilder et al.	235	193	07/14/71
E.	4056153	11/01/97	Miglierini	175	376	07/16/76
B.	4479176	10/84	Grimshaw	364	148	02/08/82
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
F.	0384734A	08/29/90	EP	E21B	10/16	X
G.	2241266	08/28/91	GB	E21B	10/46	X
H.	2371366 A	07/24/02	GB	E21B	44/00	X
I.	1654515	03/29/88	SU (with translation)	E21B	10/16	X
NON-PATENT DOCUMENTS						
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)					DATE
J.	European Search Report for EP03021140.3; 6 pages					02/04/2004
K.	Wilson C. Chin, "Wave Propagation in Petroleum Engineering" (1994)					1994
L.	Brochure entitled: "Twist & Shout", Smith International, Inc., (SB2255.1001), 4 pages					Printed 06/2004
M.	Adam T. Bourgoynne Jr et. al., "Applied Drilling Engineering", Society of Petroleum Engineers Textbook Series (1991)					1991
N.	J. P. Nguyen, "Oil and Gas Field Development Techniques: Drilling" (translation 1996, from French original 1993)					1996
O.	"Making Hole", part of Rotary Drilling Series, edited by Charles Kirkley (1983)					1983
P.	"Drilling Mud", part of Rotary Drilling Series, edited by Charles Kirkley (1984)					1984
Q.	H.G. Benson, "Rock Bit Design, Selection and Evaluation", presented at the spring meeting of the pacific coast district, American Petroleum Institute, Division of Production, Los Angeles, May, (1956)					05/1956
R.	J.C. Estes, "Selecting the Proper Rotary Rock Bit", Journal of Petroleum Technology, Nov., (1971), pp1359-1367					11/1971
S.	Sikarskie, et. al., "Penetration Problems in Rock Mechanics", American Society of Mechanical Engineers, Rock Mechanics Symposium, (1973)					1973
EXAMINER				DATE CONSIDERED		
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PTO-1449 Information Disclosure Citation in an Application		Application No. 10/607,900		Applicant(s) William W. King				
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U.S. PATENT DOCUMENTS								
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
		4617825	10/1986	Ruhovets	73	152.05	09/12/85	
	B.	4646240	02/1987	Serra et al.	364	422	04/07/86	
	C.	4694686	9/87	Fildes et al.	324	71	--	
	D.	4718011	01/1988	Patterson, Jr.	364	422	11/24/86	
	E.	4793421	12/88	Jasinski	175	27	07/13/87	
	F.	4794534	12/88	Millheim	175	40	08/08/85	
	G.	4794535	12/88	Gray et al.	364	420	08/18/86	
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	H.	1691497	05/30/88	SU (with translation)	E21B	10/16	X	
	I.	1020253	11/14/03	NL	-	-	X	
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	K.							
NON-PATENT DOCUMENTS								
		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)						DATE
	L.	Dykstra, et. al., "Experimental Evaluations of Drill String Dynamics", Amoco Report Number SPE 28323, (1994)						1994
	M.	Kenner and Isbell, "Dynamic Analysis Reveals Stability of Roller Cone Rock Bits", SPE 28314, (1994)						1994
	N.	Bassiouni, Z., "Theory, Measurement, and Interpretation of Well Logs"; Richardson, TX 1994; 23 pgs.						1994
	O.	Burke et al., "Computer Processing of Log Data Improves Production in Chaveroo Field"; pp. 889-895; <i>Journal of Petroleum Technology</i>						07/1967
	P.	Doveton, J.D. et al., "Fast Matrix Methods for the Lithological Interpretation of Geophysical Logs", Geomathematical and Petrophysical Studies in Sedimentology; 17 pgs.						07/1978
	Q.	Doveton, John D.; "Geologic Log Analysis Using Computer Methods" <i>AAGP Computer Applications in Geology</i> , No. 2; 30 pgs.						1994
	R.	Harris, Martin H et al., "A Computer-Oriented Generalized Porosity-Lithology Interpretation of Neutron, Density and Sonic Log", 10 pgs.						02/1971
	S.	Rider, Malcom; <i>The Geological Interpretation of Well Logs</i> , Second Edition; Gulf Publishing, Houston, 35 pgs.						1996
	T.	Schlumberger Log Interpretation Principles/Applications: <i>Schlumberger Educational Services</i> ; 15 pgs.						1991
	U.	Dewan, John T.; "Essentials of Moder Open-Hole Log Interpretation", pp. 210227, NL Industries Inc.						1983
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	4845628	7/89	Gray et al.	364	420	08/18/86
B.	4852399	08/89	Falconer	73	151.5	07/13/88
A.	4875530	10/89	Frink et al.	175	27	03/24/89
C.	4876886	10/89	Bible et al.	73	151.5	04/04/88
D.	4914591	4/90	Warren et al.	175	40	--
E.	4916616	04/1990	Freedman et al.	364	422	12/08/86
F.	4926686	5/90	Fay	73	151	09/19/88
G.	4926950	05/90	Zijsling	175	39	12/20/88
H.	4928521	05/90	Jardine	73	152.43	03/27/89
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
I.						
J.						
NON-PATENT DOCUMENTS						
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K.	Franco, Victor Hugo, "Introduction to Wireline Log Analysis", Western Atlas International, Houston; pp 185-231					1992
L.	Crain, E.R.; "The Log Analysis Handbook, Volume One: Quantative Log Analysis Methods", PennWell, Tulsa, OK					1986
M.	Prammer, M.G. et al., "Measurements of Clay-Bound Water and Total Porosity by Magnetic Resonance Logging", SPE paper 36522					1996
N.	Oort, Eric Van, "Physico-Chemical Stabilization of Shales", SPE paper 37623					1996
O.	Smith, L. et al., "Successful Field Application of an Electro-Negative 'Coating' to Reduce Bit Balling Tendencies in Water Based Mud", SPE/IADC paper 35110					1996
P.	Glover, et al., "New Advances and Applications of Combining Simulation and Optimization", Proc. Winter Simulation Conference, pp. 144-152					12/1996
Q.	Hill et al., "Intelligent Drilling System for Geological Sensing", Proc. Of the IEEE/RSJ Int. Conf. On Intelligent Robots and Systems, Vol. 1, pp. 495-501					07/1993
R.	Hancke et al., "A Control System for Optimizing Deep Hole Drilling Conditions", Proc. IECON Inter. Conf. On Industrial Electronics, Control and Instrument", vol. 3, pp. 2279-2284.					11/1991
S.	Murphy, Don; "Selecting the Right Rotary Bit is the Place to Smart Cutting Costs", The Oils & Gas Journal, pp. 88-92.					02/03/69
T.	Foucault, Hubert et al., "An Integrated Drilling Optimazation for Faster and Higher Improvements in Oseberg South", Halliburton Energy Services; Hydro, 8 pages.					2003
U.	Jackson, R.A.; "Cost/Foot: Key to Economic Selection of Rock Bits", World Oil, pp. 83-85.					06/1972
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 JUN 21 2004
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	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4981037	1/91	Holbrook et al.	166	250	--
A.	5010789	4/91	Brett et al.	76	108.2	10/06/89
B.	5012674	5/91	Millheim et al.	-	-	--
C.	5216612	06/1993	Cornett et al.	364	468	07/16/90
D.	5216917	6/93	Detournay	175	39	--
E.	5239467	08/1993	Kelly et al.	364	421	02/19/92
F.	5251286	10/1993	Wiener et al.	395	22	03/16/92

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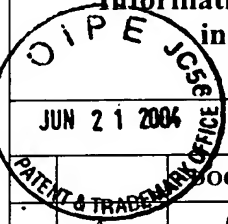
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NON-PATENT DOCUMENTS

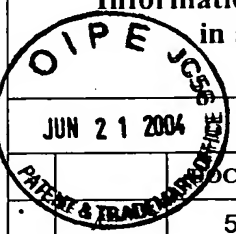
	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
I.	Estes, Jack C.; "Guidelines for Selecting Rotary Insert Rock Bit", Petroleum Engineer, pp. 30-34.	09/1974
J.	Chambers, Robert et al., "Drilling Man's Guide to Better Bit Selection", Petroleum Engineer, pp. 100-108.	06/1982
K.	Novig, T., "Factors Affecting Rock Bit Selection", Oil Gas Magazine	04/1988
L.	Soemodihardjo, W. et al., "Application of an Expert System to Rotary Drilling Bit Selection", 1 st Victorian Dep. Of Manufacturing Ind. Dev., pp. II-17 through II-40.	11/1991
M.	Dfendiyev, G.M. et al., "The Optimum Decision in Cutting-Type Drilling Bits Selection with Regard to their Operating Conditions and the Vagueness of the Task Pose", Energy Sources, Vol, 13, pp. 243-250.	1991
N.	"Advanced Bit Engineering, Selection Lowers Drilling Cost", Petroleum Engineer No. 9, Vol. 65, p. 3.	09/1993
O.	Falcao, J.L. et al., "PDC Bit Selection through Cost Prediction Estimates Using Crossplots and Sonic Log Data", SPE/IADC 25733, pp. 525-535.	1993
P.	Pessier, R.C. et al., "Different Shales Dictate Fundamentally Different Strategies in Hydraulics, Bit Selection, and Operating Practices", SPE 28322, pp. 307-318.	1994
Q.	Tewari, Shrikant, "Dull Bit Grading and Rock Strength Analysis Key to Bit Selection", Oil & Gas Journal, pp. 45-51.	12/05/94
R.	Hameed A. et al., "Deep Wells Bit Optimization", SPE/IADC 39269, pp. 197-203	1997
S.	Perrin, V.P. et al., "Drilling-Index-A New Approach to Bit Performance Evaluation", SPE/IADC 37595, pp. 199-205.	1997
T.	De Castro, F.J.N. et al., Evaluation of Drill Bit Performance Taking into Account the in Situ State of Stress", SPE International, pp. 1-8.	1997

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A.	5282384	2/94	Holbrook	702	12	--
B.	5305836	4/94	Holbrook et al.	175	39	04/08/92
C.	5334833	08/1994	Case et al.	250	270	06/14/91
D.	5369570	11/1994	Parad	364	401	11/14/91
E.	5415030	5/95	Jogi et al.	175	39	--
F.	5416697	05/1995	Goodman	364	422	07/31/92
G.	5442950	8/95	Unalmiser et al.	73	38	10/18/93
FOREIGN PATENT DOCUMENTS						
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H.						
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NON-PATENT DOCUMENTS						
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L.	Fabian, Robert T., "In Situ Compressive Strength Analysis as an Aid in Fixed Cutter Bit Selection and Performance", ASME International, pp. 86-94.					1997
M.	Xu, H.. et al., "A Method for Bit Selection y Modeling ROP and Bit-Life", The Petroleum Society, Paper 97-78, p. 1-8.					06/08/97
N.	Security DBS, "Design at the Customer Interface", brochure					1997
O.	Dekun, Ma et al., "Computer Simulation of the Interaction between Roller Bit and Rock", Proceedings of the International Meeting on Petroleum Engineering, Part 1 of 2; vol. 1, pp. 309-317; XP002266077					1995
P.	Warren, T.M.; "Factors Affecting Torque for a Roller Cone Bit", JPT J PET Technol., vol. 36, no. 10, pp. 1500-1508; XP002266079					06/1989
Q.	Sheppard, M.C et al., "Forces at the Teeth of a Drilling Rollercone Bit: Theory and Experiment", Proceedings: 1988 SPE Annual Tehnical Conference and Exhibition; vol. Delta, pp. 253-260, XP002266080					10/02/1988
R.	Steklyanov, A.V. et al., "Improving the Effectiveness of Drilling Tools", KhM-3 Oil Industry Machine Building, Moscow, pp. 1-35.					1991
S.	Pending U.S. Continuation Patent Application Serial No. 10/669,105 entitled "Method and System for Predicting Performance of a Drilling System for a Given Formation", filed September 23, 2003 by William A. Goldman et al. (Attorney Docket 074263.0170)					09/23/2003
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U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	5449047	9/95	Schivley, Jr.	175	27	09/07/94
B.	5458207	10/95	Mattero	175	27	04/21/92
C.	5461562	10/1995	Tabanou et al.	364	422	06/21/94
D.	5539704	07/1996	Doyen et al.	367	73	06/23/95
E.	5608162	03/04/97	Ho	73	152.48	07/13/95
F.	5660239	08/1997	Mueller	175	61	09/27/93
G.	5704436	1/98	Smith et al.	175	27	03/25/96

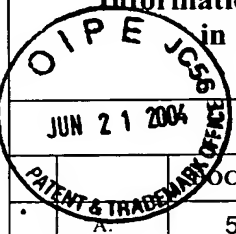
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A.	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	5767399	6/98	Smith et al.	702	10	--
	5794720	8/98	Smith et al.	-	-	--
	5845258	12/1998	Kennedy	705	8	06/16/95
	5963910	10/1999	Ulwick	705	7	09/20/96
	5965810	10/99	Holbrook	166	254	--
	6021859	2/00	Tibbitts et al.	175	431	--
	6026912	2/22/00	King et al.	-	-	--

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	6044327	03/28/00	Goldman	702	11	11/13/97	
B.	6052649	04/18/00	Goldman et al.	702	11	05/18/98	
C.	6109368	8/00	Goldman et al.	175	39	--	
D.	6131673	10/17/00	Goldman et al.	175	40	03/26/98	
E.	6155357	12/5/00	King et al.	-	-	--	
F.	6169967	01/02/01	Dahlem et al.	703	10	09/04/98	
G.	6233498	5/15/01	King et al.	-	-	--	

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	6276465	8/21/01	Cooley et al.	-	-	--
B.	6374926	04/23/02	Goldman et al.	175	39	06/21/00
C.	6389360	5/02	Alft et al.	702	9	--
D.	6408953	06/25/02	Goldman et al.	175	39	08/28/00
E.	6424919	7/23/02	Moran et al.	-	-	--
F.	6612382	09/02/03	King	175	40	03/28/01
G.	2002/0120401	9/01	Macdonald et al.	702	6	--
H.	4096385	06/78	Marett	702	8	--
I.	4903527	02/90	Herron	702	8	--
J.	5205164	04/93	Steiger et al.	702	9	--
K.	5330016	07/94	Paske et al.	-	-	--
L.	2004/0059554	03/25/04	Goldman et al.	703	7	09/23/03

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